AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method of modulating a digital signal of width L in frequency on a given useful frequency band comprising ~~the following steps~~:

[[-]] ~~a separation of~~ separating the digital signal into N blocks b_n ($1 \leq n \leq N$),

[[-]] [[a]] splitting [[of]] the given useful frequency band into N contiguous parts P_n,

[[-]] ~~a definition of~~ defining channels C_n, of width l_n in frequency, lying within an associated part P_n, the channels C_n being separated,

[[-]] [[a]] distributing [[of]] each block of digital signals b_n over the associated channel C_n.

2. (currently amended): The method of modulation as claimed in the claim 1, wherein the channels C_n are defined by taking account of a predetermined minimum distance between the channels.

3. (currently amended): The method of modulation as claimed in the claim 2, wherein it ~~comprises~~ comprising:

~~a step of~~ determining the minimum distance between the channels, the minimum distance being determined as a function of the number N of channels, of their width l_n, and of the mean width of the frequency band affected by the phenomenon of flat fading.

4. (currently amended): The method of modulation as claimed in the claim 3, wherein the minimum distance is determined [[in]] such [[a way]] that a minority of channels C_n are affected by the phenomenon of flat fading.

5. (currently amended): The method of modulation as claimed in the claim 1, wherein the channels C_n are of identical widths equal to an Nth of the width of the digital signal L: $l_n = L/N$,

$\forall\ 1 \leq n \leq N.$

6. (currently amended): The method of digital modulation as claimed in the claim 1 wherein :

[[-]] the digital signal is separated into N = 2 blocks b_n,

[[-]] the given useful frequency band is split into N = 2 parts P_n,

[[-]] the first block b_1 is distributed over a channel C_1 of width L/2 lying within the first part P_1 of the given useful frequency band and the second block b_1 is distributed over a channel C_2 of width L/2 lying within the second part P_2 of the given useful frequency band.

7. (currently amended): The method of modulation as claimed in the claim 1, wherein ~~that~~ the given useful frequency band is the FM band.

8. (currently amended): A modulator of digital signals over a given useful frequency band implementing the method of modulation as claimed in [[the]] claim[[s]] 1, ~~wherein it comprises:~~ comprising:

[[-]] means of separation [[(31)]] of the digital signal into N blocks b_n ($1 \leq n \leq N$),

[[-]] means of splitting [[(32)]] of the given useful frequency band into N contiguous parts P_n,

[[-]] means of definition [[(33)]] of channels C_n of width l_n in frequency, lying within the associated part P_n,

[[-]] means of distributing [[(34)]] of each block of digital signals b_n over the associated channel C_n.

9. (currently amended): A demodulator of digital signals conveyed on a given useful frequency band by a transmitter comprising a modulator as claimed in claim 8, ~~wherein it comprises:~~ comprising:

[[-]] means of scanning [[(81)]] of the N channels C_n ~~making it possible to~~ enabling ~~read~~ reading of the N blocks b_n of signals distributed over these channels,

[[-]] means of recombination [[(82)]] of the N blocks read $\hat{b}_n$ in the N channels C_n into a digital signal $\hat{s}[m]$.

10. (currently amended): A transmitter of digital signals on a given useful frequency band comprising at least one transmission chain comprising a modulator as claimed in claim 8, wherein the transmission chain comprises an error corrector coder [[(10)]] conveying the coded digital signal $c^q[m]$ to the modulator [[(30)]].

11. (currently amended): The transmitter as claimed in the claim 10, wherein the transmission chain comprises an interleaver [[(20)]] placed between the error corrector coder [[(10)]] and the modulator [[(30)]].

12. (currently amended): The transmitter as claimed in the claim 10, wherein ~~with each of the Q transmission chains is associated~~ a distinct set of channels $\{C^q_n\}$ is associated with each of the Q transmission chains.

13. (currently amended): A receiver of digital signals conveyed on a given useful frequency band by a transmitter ~~as claimed in claim 10~~ comprising a demodulator ~~as claimed in claim 9 and in that it comprises~~ wherein: a decoder [[(100)]] associated with the error corrector coder [[(10)]] of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator [[(80)]].

14. (currently amended): A receiver of digital signals conveyed on a given useful frequency band by a transmitter ~~claim 11~~ comprising :

a demodulator ~~as claimed in claim 9 in that it comprises~~, wherein

[[-]] a deinterleaver [[(90)]] associated with the interleaver [[(20)]] of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator [[(80)]],

[[-]] a decoder [[(100)]] associated with the error corrector coder [[(10)]] of the transmitter receiving the digital signal recombined deinterleaved $\hat{c}[m]$ by the deinterleaver [[(90)]].

15. (currently amended): Use of the transmitter as claimed in [[the]] claim 10 ~~and of the receiver as claimed in the claim 13~~ for [[the]] conveying [[of]] digital signals in the FM band.

16. (new): Use of the receiver as claimed in claim 13 for conveying digital signals in the FM band.

17. (new): A receiver of digital signals conveyed on a given useful frequency band by a transmitter as claimed in claim 10 comprising a demodulator wherein: a decoder associated with the error corrector coder of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator.

18. (new): A receiver of digital signals conveyed on a given useful frequency band by a transmitter comprising a demodulator as claimed in claim 9 wherein:

a decoder associated with the error corrector coder of the transmitter receiving the digital signal recombined $\hat{s}[m]$ by the demodulator.